

Application No. 09/979,569

Attorney Docket No. PG3707USW

**REMARKS / ARGUMENTS**

This Amendment D is in response to the Office Action of November 12, 2004 marked FINAL.

Claims 1-4, 5-41 are pending. Claims 42-78 have been cancelled without prejudice. Applicants reserve the right to prosecute such cancelled claims in an appropriate continuation application.

In the present Amendment, applicant has amended claim 1 to better define certain aspects of the invention, to achieve allowance of the claim or to present the claims in better condition for appeal. Claim 5 has been cancelled. Claim 15 has been amended to specify "plate" instead of "bed", reflecting proper claim consistency and appropriate antecedent basis. Claim 27 has been amended to specify "container" rather than "blind cavity" again to provide proper antecedent basis.

In the November 2004 Action, the Examiner maintained his rejections of the pending claims based on the LEFORT, DWORAK and MORRIS references.

1. **The Claimed Invention is Novel and Non-Obvious Over LEFORT**

As an initial matter, applicant specifically withdraws the supporting argument submitted in reply to the previous Office Action at page 14, third paragraph, which states that in LEFORT there isn't a "closed-off perforation" when the container/bottle 15 receives powder by movement of the doctor blade 10 in the associated groove 17. (*"It can also be pointed out that when the doctor blades 10 scrape the powder from the grooves 17 into the funnels 18 the funnels are in open communication with the bottles 15 because this action fills the bottles with the powder (see FIG. 7, for example). Thus, the doctor blades 10 in LEFORT do not direct powder into a closed-off perforation in a perforated plate, as required in step (ii) of method claim 1 identified above."*) Upon further consideration, LEFORT describes closing of the perforation with a container, and therefore, applicant's

**BEST AVAILABLE COPY**

Application No. 09/979,569  
Attorney Docket No. PG3707USW

characterization was not strictly correct. There was no intention to mislead the Examiner with this submission.

However, the Examiner's assertions that Claims 1-2, 5-9, 14-17, 22-23, 27, 28, 37-38, 40-42 are anticipated by LEFORT remain incorrect for the reasons indicated in the response to the last official action.

Amended claim 1, however, clarifies the novelty and non-obviousness of the present invention. Independent method Claim 1 was amended to read

1. *A method of loading a container with a defined quantity of product which comprises:*
    - a) *i) providing a perforated plate which has first and second sides and a perforation which has a first opening in the first side and a second opening in the second side;*
      - ii) closing off the perforation at its second opening by locating a closing member at the second side of the perforated plate;*
    - b) *directing powder through the first opening into said closed-off perforation onto the closing member by the action of moving a first leveller blade on a sweeping path relative to the perforated plate; and*
    - c) *transferring the contents of the perforation to said container;*
- wherein in step b) the first leveller blade is spaced from the first side of the perforated plate and presents a forward acute angle to the sweeping path.*

Claim 1 of the present application concerns a method for loading a defined quantity of a product into a container. To this end, the method requires provision of a perforated plate in which a perforation extends from a first opening in a first side of the plate to a second opening in a second side of the plate. The perforation is closed off at its second opening

Application No. 09/979,569  
Attorney Docket No. PG3707USW

by locating a closing member at the second side of the plate. The product is then directed through the first opening into the closed-off perforation onto the closing member. This is achieved by moving a first leveller blade relative to the plate on a sweeping path which is spaced from the first side of the plate. The first leveller blade presents a forward acute angle to the sweeping path. Finally, the content of the perforation is transferred to a container.

The LEFORT apparatus operates as follows. The apparatus has a turntable 16 which is provided with a plurality of radial grooves 17 in its upper side. The radial grooves 17 each intersect a funnel 18 which has an opening in the lower side of the turntable 16. As the turntable 16 rotates, it rotates each groove 17 underneath a powder reservoir 19. Located in the powder reservoir 19 are a pair of contra-rotating stirrers 20.

Each revolution of the turntable 16 results in each groove 17 sequentially undergoing a filling phase and an emptying phase. The filling phase is when the groove 17 rotates underneath the powder reservoir 19 so as to be gravity fed with powder from the reservoir 19. The emptying phase occurs between the groove exiting the powder reservoir 19 and re-entering it.

In the filling phase, a doctor blade 10 disposed at the free end of a rocker arm 21 closes the outer radial end of the groove 17 so as to prevent the powder being filled into the groove 17 from the reservoir 19 discharging into the funnel 18. After the groove 17 has rotated from underneath the powder reservoir 19, it undergoes the emptying phase.

In the emptying phase the doctor blade 10 is lifted out of the groove 17, moved radially inwardly above the groove and the powder in the groove, and then pivoted back into the groove 17. The doctor blade is then moved radially outwardly along the bottom of the groove 17 to scrape the powder into the funnel 18.

By this time, a container 15 has been secured in registration with the open end of the funnel 18 so that the powder is ejected into the container 15. The doctor blade 10 is

Application No. 09/979,569  
Attorney Docket No. PG3707USW

**BEST AVAILABLE COPY**

moved along the bottom of the groove 17 until it reaches the outer radial end thereof in preparation for the groove 17 moving back underneath the powder reservoir 19 for a new filling phase.

The movement of the doctor blade 10 between its various positions with respect to the groove 17 is controlled by a series of cams and guide rods.

After the container 15 has received its quantity of powder, it is removed from the turntable 16 for replacement by another container 15 which is to be filled in the same manner.

It is clear that neither the filling phase nor the emptying phase of operation of the LEFORT apparatus corresponds to the method of Claim 1.

In the filling phase, powder is only filled into the groove 17. The doctor blade 10 prevents the powder from being discharged into the funnel 18. Consequently, in the filling phase the powder is not delivered into a closed-off perforation through a first perforation opening on a first side of the turntable 16 onto a closing member which closes-off a second perforation opening at a second side of the turntable 16 by location of the closing member at the second side, as required by Claim 1.

For good measure, it can also be added that there is no clear and unambiguous disclosure in LEFORT of the stirrers 20 being spaced above the plate. Thus, the feature of the "first leveller blade" required by Claim 1 is also missing from LEFORT during its filling phase.

In the emptying phase, the doctor blade 10 moves along the bottom of the groove 17. Moreover, the doctor blade is oriented perpendicularly to its "sweeping path". Accordingly, during its emptying phase, the LEFORT apparatus does not use a "first leveller blade" according to Claim 1.

Application No. 09/979,569  
Attorney Docket No. PG3707USW

As amply demonstrated, the LEFORT reference does not disclose the method of Claim 1 and its dependents. The Claims of this application are therefore novel over LEFORT.

As regards non-obviousness, one of ordinary skill would have received no suggestion or motivation to adapt the LEFORT apparatus to arrive at the method of the claims hereof. For example, the use of the doctor blade 10 as a "gate" to hold back the powder from entering the funnel 18 in the filling phase is an essential feature of the LEFORT teaching since it allows accurate volumetric dosing of the powder into the groove 17.

During the emptying phase it is also essential that the doctor blade 10 sweep along the bottom of the groove 17 to ensure that the correct amount of powder in the groove 17 is transferred into the container 15. Spacing the doctor blade 10 above the bottom of the groove 17 would go against the fundamental teaching in LEFORT.

Thus, it is submitted that the Claims are also non-obvious over LEFORT.

2. Non-obviousness of Claims 10-13, 39 and 41

As described above, LEFORT fails to describe every element of the claimed method, as combined in claim 1. There is no motivation to modify LEFORT in such a way to achieve the method claimed in claim 1. Therefore, claim 1 is novel and non-obvious over LEFORT. Claims 10-13, 39 and 41 are non-obvious for the same reason as claim 1.

3. Non-Obviousness of Claims Over DWORAK in view of MORRIS

The combination of DWORAK and MORRIS is untenable for the reasons advanced in response to the previous Office Action. The ploughs 84a, 84b, 86a, and the wiper 88 in the DWORAK apparatus would never be replaced with the doctor blades 22, 23 disclosed in MORRIS. As clearly shown in Figure 2 of DWORAK, the ploughs 84a, 84b, 86a and the wiper 88 are all in direct contact with the topside of the circular cup plate 50. It will be observed that these features restrict the powder to a recirculation path 20a and that

Application No. 09/979,569  
Attorney Docket No. PG3707USW

none of the powder passes underneath these features. By contrast, the doctor blades 22, 23 disclosed in MORRIS are spaced above the surface on which the powder rests. In short, it is an essential feature in the DWORAK method for the ploughs 84a, 84b, 86a and the wiper 88 to be in direct contact with the topside of the plate 50. DWORAK would therefore not be modified so that the ploughs 84a, 84b, 86a and/or the wiper 88 would be spaced above the topside of the plate 50, as required for the "first leveller blade" of Claim 1.

For good measure, it can also be added that the skilled person in the art would also recognize the mutual incompatibility of the methods disclosed in DWORAK and MORRIS and would not consider transferring teaching from one to the other. DWORAK is concerned with directing powder over perforations for filling a package located under the perforations. MORRIS, on the other hand, is concerned with powder dosing by dipping dosing tubes 15 into a powder bed 4,5 and transferring the powder from the tubes to containers.

Thus, the asserted combination of DWORAK and MORRIS is specious, and does not render the claims obvious.

BEST AVAILABLE COPY

Application No. 09/979,569  
Attorney Docket No. PG3707USW

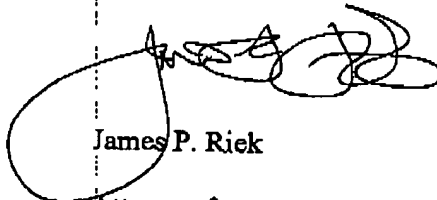
**BEST AVAILABLE COPY**

**Conclusion**

In light of these amendments, all issued raised by the examiner to date have been addressed. As such, the claims are asserted to be in a condition for allowance. Applicant requests that a timely Notice of Allowance be issued in this case. If any matters exist that preclude issuance of a Notice of Allowance, the examiner is requested to contact the applicant's representative at the number indicated below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge any fees or credit any overpayment, particularly including any fees required under 37 CFR Sections 1.16 and/or 1.17, and any necessary extension of time fees, to deposit Account No. 07-1392.

Respectfully submitted,



Dated: 2.8.05

James P. Riek

Attorney for Applicant  
Reg. No. 39,009  
Tel. (919) 483-8022  
Fax. (919) 483-7988